Information-Request/Submittal/Release	Number	S	038-0001
Number of attached pages: 2	New ☒		
Project: MACS / NG-0	Revision ☐		
Originator: TD Pike	If revision, provide the following:		
Date: August 5, 2003	Previous Submittal	038-xxxx	
Database Reference: WorkManager reference	ECR/ECN	038-xxxx	

Scope

White Beam Conditioning System (WBC) Primary Interfaces

Purpose

To provide information on the function of the faces of MACS .igs bodies and to establish where design responsibility lies for the various functional elements of the WBC.

Description

Annotations describing functional interfaces of the .igs bodies that are pending submission or have been submitted since the establishment of the MACS 6200 datums.

Filing

When filed as a submittal, this form and the information attached to it transforms into a released document when it is signed by all parties named in it. The form with attachments is kept on file in the office of the NIST chief engineer. When attachments are electronic in nature (such as electronic CAD data) that information and its hierarchical position in the project design tree shall be identified in or under this submittal. Information Requests, Submittals and Releases are numbered separately, yet sequentially.

Change Process

Anyone can propose a change to documentation that is released under this form. To such end an Engineering Change Request (ECR) is filed. A priori, the change board is composed of the individuals that signed the submittal against which the ECR is drawn. Approval of the ECR turns it into an Engineering Change Notice (ECN), which gives authority to prepare a new submittal. The new submittal covers at least the fully executed ECN. Approval of the new submittal signifies close-out (full implementation) of the ECN.

Endorsements (list composition is part of release and determines Change Board for ECR/N's)

	Submitted		Reviewed		S
1	TD Pike		1	DJ Pierce	038-0001
2			2		
3			3		
4			4		
5			5		

MACS I NO-0 Interface Specification
Revision 1
1 WBC Primary Interfaces
1.1 Reactor
1.1.1 .igs body data indicates line-to-line shielding at the reactor face. Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers.
1.2 Beam Tube
1.2.1 .igs body data indicates instrument clearance locations for the beam tube. Beam tube sectioning, connections, support and clearances are the responsibility of the NCNR engineers.
1.3 Neutron Guide Tubes
1.3.1 .igs body data indicates approximate locations for the existing primary guide tube shields. Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers.
1.4 Shutter
1.4.1 .igs body data indicates the location of the shutter cabinet, beam tubes, and shutter block. Concepts are included for the shutter actuation, however the final design and operation of the shutter as well as the shielding surrounding the shutter is the responsibility of the NCNR engineers.
1.5 BT-7
1.5.1 .igs body data indicates line-to-line shielding at the BT -7 shields. Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers.
1.6 Cryo Filter Exchanger (CFX)
1.6.1 .igs body data indicates shielding surrounding the CFX.
1.6.2 CFX Dimensions: Rectangular Solid,
1200mm tall x 450mm wide x 450mm along the beam axis
1.6.3 CFX Mounting: Three point mounting to the bottom surface of the CFX. Mounting point centerlines TBD
1.6.4 CFX Actuation: Actuators for the CFX protrude approximately 1000mm beyond the upper surface of the CFX. CFX Actuator details will be submitted such that the actuator shields may be designed by the NCNR engineers
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MACS I NG-O Interface Specification
Revision 1
1.7 Beam Choke Ring (BCR)
1.7.1 .igs body data indicates instrument clearance locations for shielding adjacent to the BCR. The BCR has a height to width ratio of 1. The BCR, and BCR Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers The BCR is composed of highly neutron absorbent material.
1.8 Cask
1.8.1 .igs body data indicates line-to-line shielding at the Cask outer walls. Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers.
1.9 Kidney
1.9.1 .igs body data indicates instrument clearance locations for shielding opposite the Analyzer Kidney. Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers.
1.10 Beam Transport System (BTS)
1.10.1 .igs body data indicates instrument clearance locations for shielding adjacent to the Beam Transport system. Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers.

1.11 Top Shields
1.11.1 Top shields and top shield interfaces are the responsibility of the NCNR engineers.
1.12 Beam Dump
1.12.1 .igs body data indicates line-to-line shielding at the Get-Lost-Pipe outer walls. Shield sectioning, connections, support and clearances are the responsibility of the NCNR engineers.
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